

## **Amendments of the Claims:**

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1. (Currently amended) A high intensity discharge (HID) driver for a HID lamp, comprising:
  - an input processor connected to an input power for suppressing a transient and an in-rush current of the input power;
  - a main driver having at least one capacitance contained therein for determining an output power, the main driver being connected to the input processor and a HID lamp for driving and amplifying the input power; and
  - a protection circuit connected to the main driver and the HID lamp for controlling a timing of starting after a failure condition.
2. (Original) The HID driver of claim 1, wherein the HID driver comprises a HID ballast.
3. (Original) The HID driver of claim 1, wherein the HID lamp comprises a high pressure sodium (HPS) lamp or a metal halide lamp (HML).
4. (Original) The HID driver of claim 1, wherein the input power is an alternating current (AC) voltage in a range of about 85V to about 305V at 50HZ/60HZ.

5. (Original) The HID driver of claim 1, wherein the HID driver further comprises:

a timing circuit connected to the main driver for controlling a timing; and

a starting circuit connected to the timing circuit and the HID lamp for starting the HID lamp.

6. (Original) The HID driver of claim 5, wherein the HID driver comprises a HID ballast.

7. (Original) The HID driver of claim 5, wherein the HID lamp comprises a high pressure sodium (HPS) lamp or a metal halide lamp (HML).

8. (Original) The HID driver of claim 5, wherein the input power is an alternating current (AC) voltage in a range of about 85V to about 305v at 50HZ/60HZ.

9. (Original) The HID driver of claim 5, wherein the input power is an alternating current (AC) voltage in a range of about 85V to about 1KV at 50HZ/60HZ.

10. (Original) The HID driver of claim 5, wherein the input processor further comprises an rectifier and filter circuit.

11. (Original) The HID driver of claim 5, wherein the input processor further comprises an electromagnetic wave controller (EMC) for suppressing an electromagnetic wave interference.

12. (Original) The HID driver of claim 5, wherein the input processor further comprises a negative temperature control (NTC) resistor for suppressing the in-rush current.

13. (Original) The HID driver of claim 5, wherein the input processor further comprises a voltage sensitive resistor (RV) for suppressing the in-rush current.

14. (Original) The HID driver of claim 5, wherein the rectifier and filter circuit comprises a diode bridge circuit.
15. (Original) The HID driver of claim 5, wherein the main driver further comprises a power factor correction (PFC) circuit connected to the input processor and the protection circuit.
16. (Original) The HID driver of claim 5, wherein the main driver further comprises a special power supply connected to the input processor, and PFC circuit, the timing circuit and the protection circuit.
17. (Original) The HID driver of claim 16, wherein the special power supply comprises at least two circuit paths for supplying power.
18. (Original) The HID driver of claim 5, wherein the main driver further comprises a power driver connected to the input processor, the special power supply, the PFC circuit and the protection circuit.
19. (Original) The HID driver of claim 18, wherein the power driver further comprise a light adjuster for adjusting the brightness of the HIF lamp by adjusting a frequency of the power driver.
20. (Original) The HID driver of claim 5, wherein the main driver further comprises a half bridge inverter connected to the input processor and the HID lamp.
21. (Cancelled) Please cancel claim 21 without prejudice.

22. (Currently Amended) The HID driver of claim 5, wherein the main driver further comprises a feedback control circuit connected to the PFC circuit, ~~the~~ a power drive and ~~the~~ a half bridge inverter.
23. (Original) The HID driver of claim 5, wherein the starting circuit comprises a sub-starting circuit having a SIDAC connected in series to a diode and an inductor for starting the HID lamp quickly and reliably.
24. (Original) The HID driver of claim 5, wherein the starting circuit comprises a capacitor connected in parallel to the HID lamp in replacement of the sub-starting circuit when the HID lamp is a metal halide lamp (HML).
25. (Original) The HID driver of claim 5, wherein the starting circuit comprises a circuit having a capacitor for fine tuning an output of the HID lamp, a brightness of the HID lamp, and a low-frequency content for controlling an induced sound resonance.
26. (Original) The HID driver of claim 5, wherein the starting circuit comprises a circuit having a thyristor between a capacitor and a resistance for preventing the HID drive from restating when the HID lamp is on.
27. (Original) The HID driver of claim 5, wherein the thyristor is connected to the timing circuit to control a re-starting of the HID lamp by the timing circuit.

28. (Original) The HID driver of claim 5, wherein the main driver comprises a first integrated circuit (IC) for PFC and for governing preceding filtering and rectification and a second IC for power driving and the timing circuit comprises a third IC, and when input voltages of the first, second and third ICs are below predetermined values, the second and the third ICs are locked out and the first IC is maintained to be powered and ready for a re-starting.
- 29 (new) The HID driver of claim 1, wherein the at least one capacitance is disposed between a set of switches of the main driver and an output transformer.
30. (New) A high intensity discharge (HID) driver for a HID lamp, comprising:
- an input processor connected to an input power for suppressing a transient and an in-rush current of the input power;
  - a main driver connected to the input processor and a HID lamp for driving and amplifying the input power;
  - a protection circuit connected to the main driver and the HID lamp for controlling a timing of starting after a failure condition.
  - a timing circuit connected to the main driver for controlling a timing; and
  - a starting circuit connected to the timing circuit and the HID lamp for starting the HID lamp, wherein the starting circuit comprises a circuit having a capacitor for fine tuning an output of the HID lamp, a brightness of the HID lamp, and a low-frequency content for controlling an induced sound resonance.

31. (New) A high intensity discharge (HID) driver for a HID lamp, comprising:

an input processor connected to an input power for suppressing a transient and an in-rush current of the input power;

a main driver connected to the input processor and a HID lamp for driving and amplifying the input power;

a protection circuit connected to the main driver and the HID lamp for controlling a timing of starting after a failure condition;

a timing circuit connected to the main driver for controlling a timing; and

a starting circuit connected to the timing circuit and the HID lamp for starting the HID lamp, wherein the starting circuit comprises a circuit having a thyristor between a capacitor and a resistance for preventing the HID drive from restating when the HID lamp is on.

32. (New) A high intensity discharge (HID) driver for a HID lamp, comprising:

an input processor connected to an input power for suppressing a transient and an in-rush current of the input power;

a main driver connected to the input processor and a HID lamp for driving and amplifying the input power;

a protection circuit connected to the main driver and the HID lamp for controlling a timing of starting after a failure condition;

a timing circuit connected to the main driver for controlling a timing; and

a starting circuit connected to the timing circuit and the HID lamp for starting the HID lamp,  
and a thyristor being connected to the timing circuit to control a re-starting of the  
HID lamp by the timing circuit.

33. (New) A high intensity discharge (HID) driver for a HID lamp, comprising:

an input processor connected to an input power for suppressing a transient and an in-rush  
current of the input power;

a main driver connected to the input processor and a HID lamp for driving and amplifying  
the input power, the main driver comprising a first integrated circuit (IC) for PFC  
and for governing preceding filtering and rectification and a second IC for power  
driving and the timing circuit comprises a third IC, and when input voltages of the  
first, second and third ICs are below predetermined values, the second and the third  
ICs are locked out and the first IC is maintained to be powered and ready for a  
re-starting;

a protection circuit connected to the main driver and the HID lamp for controlling a timing  
of starting after a failure condition;

a timing circuit connected to the main driver for controlling a timing; and

a starting circuit connected to the timing circuit and the HID lamp for starting the HID lamp.